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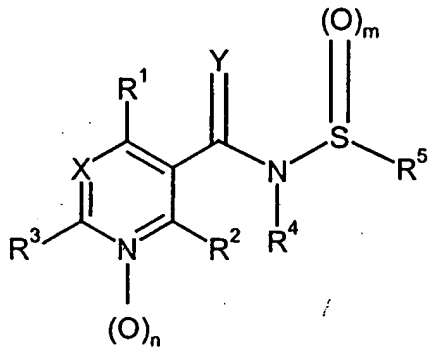
What is claimed is (US):

1. A compound of the formula (I) or a salt thereof



(I)

where the symbols and indices are as defined below:

X is =CH- or =N-;

Y is =O or =S;

n is 0 or 1;

m is 0, 1 or 2;

R^1 is $(C_1\text{-}C_6)$-alkyl, $(C_1\text{-}C_6)$-haloalkyl, -S(halogen)$_5$ or halogen, where one or two CH_2 groups may be replaced by -O- or -S- or -N$(C_1\text{-}C_6)$-alkyl, with the proviso that heteroatoms may not be adjacent;

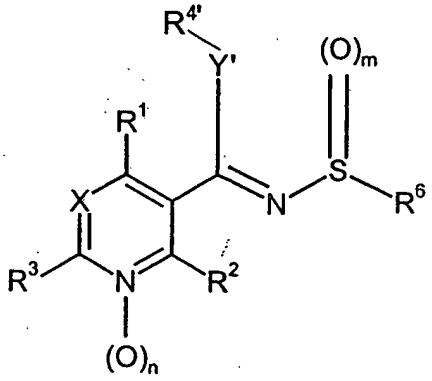
R^2, R^3 independently of one another are hydrogen, $(C_1\text{-}C_6)$-alkyl, $(C_1\text{-}C_6)$-haloalkyl or halogen, where one or two CH_2 groups may be replaced by -O- or -S- or -N$(C_1\text{-}C_6)$-alkyl, with the proviso that heteroatoms may not be adjacent;

R^4 is hydrogen, $(C_1\text{-}C_{10})$-alkyl, $(C_3\text{-}C_{10})$-cycloalkyl, $(C_3\text{-}C_{10})$-alkenyl, $(C_3\text{-}C_{10})$-alkynyl, $(C_6\text{-}C_{14})$-aryl, $(C_3\text{-}C_{10})$-heterocyclyl or $(C_1\text{-}C_{10})$-alkanoyl, where the radicals mentioned may be unsubstituted or mono- or polysubstituted;

R^5 is hydrogen, $(C_1\text{-}C_{10})$-alkyl, $(C_3\text{-}C_{10})$-alkenyl, $(C_3\text{-}C_{10})$-alkynyl, $(C_3\text{-}C_8)$-cycloalkyl, $(C_4\text{-}C_8)$-cycloalkenyl, $(C_8\text{-}C_{10})$-cycloalkynyl, aryl or heterocyclyl, where the radicals mentioned may be unsubstituted or mono- or polysubstituted;

except for compounds of the formula (I), in which X is =CH-, m is 1 or 2 and R^5 is unsubstituted or substituted (C_1-C_{10})-alkyl.

2. A compound of the formula (II) or a salt thereof



(II)

where the symbols and indices are as defined below:

X is =CH- or =N-;

Y′ is -O- or -S-;

n is 0 or 1;

m is 0, 1 or 2;

R^1 is (C_1-C_6)-alkyl, (C_1-C_6)-haloalkyl, -S(halogen)$_5$ or halogen, where one or two CH_2 groups may be replaced by -O- or -S- or -N(C_1-C_6)-alkyl, with the proviso that heteroatoms may not be adjacent;

R^2, R^3 independently of one another are hydrogen, (C_1-C_6)-alkyl, (C_1-C_6)-haloalkyl or halogen, where one or two CH_2 groups may be replaced by -O- or -S- or -N(C_1-C_6)-alkyl, with the proviso that heteroatoms may not be adjacent;

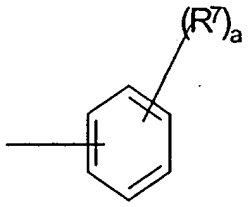
$R^{4'}$ is hydrogen, (C_1-C_{10})-alkyl, (C_3-C_{10})-cycloalkyl, (C_3-C_{10})-alkenyl, (C_3-C_{10})-alkynyl, (C_6-C_{14})-aryl or (C_3-C_{10})-heterocyclyl, where the radicals mentioned may be unsubstituted or mono- or polysubstituted; and

R^6 is hydrogen, (C_1-C_{10})-alkyl, (C_3-C_{10})-alkenyl, (C_3-C_{10})-alkynyl, (C_3-C_8)-cycloalkyl, (C_4-C_8)-cycloalkenyl, (C_8-C_{10})-cycloalkynyl, aryl or heterocyclyl, where the radicals mentioned may be unsubstituted or mono- or polysubstituted.

3. A compound of the formula (I) or a salt thereof as claimed in claim 7 where R^1 is SF_5, CHF_2, CF_2Cl or CF_3.

4. A compound of the formula (I) or a salt thereof as claimed in claim 1 where X is =CH-, Y is =O, m and n are 0, R^1 is CF_3, R^2, R^3 and R^4 are hydrogen and R^5 is $(C_1\text{-}C_{10})$-alkyl, $(C_2\text{-}C_{10})$-alkenyl, $(C_2\text{-}C_{10})$-alkynyl, $(C_3\text{-}C_8)$-cycloalkyl, $(C_4\text{-}C_8)$-cycloalkenyl, $(C_8\text{-}C_{10})$-cycloalkynyl, aryl or heterocyclyl, where the radicals mentioned may be unsubstituted or mono- or polysubstituted.

5. A compound of the formula (I) or a salt thereof as claimed in claim 1 where R^5 is a radical of the formula IIa



(IIa)

where the symbols and indices are as defined below:

a is 0, 1, 2, 3 or 4;

R^7 are identical or different R^8, or two radicals R^7 together with the atoms to which they are attached form a three- to eight-membered saturated or unsaturated ring system which is unsubstituted or substituted by one or more radicals R^8 and which may also contain further heteroatoms, selected from the group consisting of O, N, S, SO and SO_2;

R^8 are identical or different R^9, R^{10}, $-C(W)R^9$, $-C(=NOR^9)R^9$, $-C(=NNR^9_2)R^9$, $-C(=W)OR^9$, $-C(=W)NR^9_2$, $-OC(=W)R^9$, $-OC(=W)OR^9$, $-NR^9C(=W)R^9$, $-N[C(=W)R^9]_2$, $-NR^9C(=W)OR^9$, $-C(=W)NR^9\text{-}NR^9_2$, $-C(=W)NR^9\text{-}NR^9[C(=W)R^9]$, $-NR^9\text{-}C(=W)NR^9_2$, $-NR^9\text{-}NR^9C(=W)R^9$, $-NR^9\text{-}N[C(=W)R^9]_2$, $-N[(C=W)R^9]\text{-}NR^9_2$, $-NR^9\text{-}N[(C=W)WR^9]$, $-NR^9[(C=W)NR^9_2]$, $-NR^9(C=NR^9)R^9$, $-NR^9(C=NR^9)NR^9_2$, $-O\text{-}NR^9_2$, $-O\text{-}NR^9(C=W)R^9$, $-SO_2NR^9_2$, $-NR^9SO_2R^9$, $-SO_2OR^9$, $-OSO_2R^9$, $-OR^9$, $-NR^9_2$, $-SR^9$, $-SiR^9_3$, $-PR^9_2$, $-P(=W)R^9_2$, $-SOR^9$, $-SO_2R^9$, $-PW_2R^9_2$, $-PW_3R^9_2$ or two radicals R^8 together are (=W), (=N-R^9), (= CR^9_2), (= CHR^9) or (=CH_2);

W is = O or = S;

R^9 are identical or different (C_1-C_6)-alkyl, (C_2-C_6)-alkenyl, (C_2-C_6)-alkynyl, (C_3-C_8)-cycloalkyl, (C_4-C_8)-cycloalkenyl, (C_3-C_8)-cycloalkyl-(C_1-C_4)-alkyl, (C_4-C_8)-cycloalkenyl-(C_1-C_4)-alkyl, (C_3-C_8)-cycloalkyl-(C_2-C_4)-alkenyl, (C_4-C_8)-cycloalkenyl-(C_2-C_4)-alkenyl, (C_1-C_6)-alkyl-(C_3-C_8)-cycloalkyl, (C_2-C_6)-alkenyl-(C_3-C_8)-cycloalkyl, (C_2-C_6)-alkynyl-(C_3-C_8)-cycloalkyl, (C_1-C_6)-alkyl-(C_4-C_8)-cycloalkenyl, (C_2-C_6)-alkenyl-(C_4-C_8)-cycloalkenyl, aryl, heterocyclyl;
where the radicals mentioned are unsubstituted or substituted by one or more radicals R^{10} and two radicals R^9 together may form a ring system;

R^{10} are identical or different halogen, cyano, nitro, hydroxyl, thio, amino, formyl, (C_1-C_6)-alkanoyl, (C_1-C_6)-alkoxy, (C_3-C_6)-alkenyloxy, (C_3-C_6)-alkynyloxy, (C_1-C_6)-haloalkyloxy, (C_3-C_6)-haloalkenyloxy, (C_3-C_6)-haloalkynyloxy, (C_3-C_8)-cycloalkoxy, (C_4-C_8)-cycloalkenyloxy, (C_3-C_8)-halocycloalkoxy, (C_4-C_8)-halocycloalkenyloxy, (C_3-C_8)-cycloalkyl-(C_1-C_4)-alkoxy, (C_4-C_8)-cycloalkenyl-(C_1-C_4)-alkoxy, (C_3-C_8)-cycloalkyl-(C_2-C_4)-alkenyloxy, (C_4-C_8)-cycloalkenyl-(C_1-C_4)-alkenyloxy, (C_1-C_6)-alkyl-(C_3-C_8)-cycloalkoxy, (C_2-C_6)-alkenyl-(C_3-C_8)-cycloalkoxy, (C_2-C_6)-alkynyl-(C_3-C_8)-cycloalkoxy, (C_1-C_6)-alkyl-(C_4-C_8)-cycloalkenyloxy, (C_2-C_6)-alkenyl-(C_4-C_8)-cycloalkenyloxy, (C_1-C_4)-alkoxy-(C_1-C_6)-alkoxy, (C_1-C_4)-alkoxy-(C_3-C_6)-alkenyloxy, carbamoyl, (C_1-C_6)-mono- or -dialkylcarbamoyl, (C_1-C_6)-mono- or -dihaloalkylcarbamoyl, (C_3-C_8)-mono- or -dicycloalkylcarbamoyl, (C_1-C_6)-alkoxycarbonyl, (C_3-C_8)-cycloalkoxycarbonyl, (C_1-C_6)-alkanoyloxy, (C_3-C_8)-cycloalkanoyloxy, (C_1-C_6)-haloalkoxycarbonyl, (C_1-C_6)-haloalkanoyloxy, (C_1-C_6)-alkanoylamino, (C_1-C_6)-haloalkanoylamino, (C_2-C_6)-alkenoylamino, (C_3-C_8)-cycloalkanoylamino, (C_3-C_8)-cycloalkyl-(C_1-C_4)-alkanoylamino, (C_1-C_6)-alkylthio, (C_3-C_6)-alkenylthio, (C_3-C_6)-alkynylthio, (C_1-C_6)-haloalkylthio, (C_3-C_6)-haloalkenylthio, (C_3-C_6)-haloalkynylthio, (C_3-C_8)-cycloalkylthio, (C_4-C_8)-cycloalkenylthio, (C_3-C_8)-halocycloalkylthio, (C_4-C_8)-halocycloalkenylthio, (C_3-C_8)-cycloalkyl-(C_1-C_4)-alkylthio, (C_4-C_8)-cycloalkenyl-(C_1-C_4)-alkylthio, (C_3-C_8)-cycloalkyl-(C_3-C_4)-alkenylthio, (C_4-C_8)-cycloalkenyl-(C_3-C_4)-alkenylthio, (C_1-C_6)-alkyl-(C_3-C_8)-cycloalkylthio, (C_2-C_6)-alkenyl-(C_3-C_8)-cycloalkylthio, (C_2-C_6)-alkynyl-(C_3-C_8)-cycloalkylthio, (C_1-C_6)-alkyl-(C_4-C_8)-cycloalkenylthio, (C_2-C_6)-alkenyl-

$(C_4$-$C_8)$-cycloalkenylthio, $(C_1$-$C_6)$-alkylsulfinyl, $(C_3$-$C_6)$-alkenylsulfinyl, $(C_3$-$C_6)$-alkynylsulfinyl, $(C_1$-$C_6)$-haloalkylsulfinyl, $(C_3$-$C_6)$-haloalkenylsulfinyl, $(C_3$-$C_6)$-haloalkynylsulfinyl, $(C_3$-$C_8)$-cycloalkylsulfinyl, $(C_4$-$C_8)$-cycloalkenylsulfinyl, $(C_3$-$C_8)$-halocycloalkylsulfinyl, $(C_4$-$C_8)$-halocycloalkenylsulfinyl, $(C_3$-$C_8)$-cycloalkyl-$(C_1$-$C_4)$-alkylsulfinyl, $(C_4$-$C_8)$-cycloalkenyl-$(C_1$-$C_4)$-alkylsulfinyl, $(C_3$-$C_8)$-cycloalkyl-$(C_3$-$C_4)$-alkenylsulfinyl, $(C_4$-$C_8)$-cycloalkenyl-$(C_3$-$C_4)$-alkenylsulfinyl, $(C_1$-$C_6)$-alkyl-$(C_3$-$C_8)$-cycloalkylsulfinyl, $(C_2$-$C_6)$-alkenyl-$(C_3$-$C_8)$-cycloalkylsulfinyl, $(C_2$-$C_6)$-alkynyl-$(C_3$-$C_8)$-cycloalkylsulfinyl, $(C_1$-$C_6)$-alkyl-$(C_4$-$C_8)$-cycloalkenylsulfinyl, $(C_2$-$C_6)$-alkenyl-$(C_4$-$C_8)$-cycloalkenylsulfinyl, $(C_1$-$C_6)$-alkylsulfonyl, $(C_3$-$C_6)$-alkenylsulfonyl, $(C_3$-$C_6)$-alkynylsulfonyl, $(C_1$-$C_6)$-haloalkylsulfonyl, $(C_3$-$C_6)$-haloalkenylsulfonyl, $(C_3$-$C_6)$-haloalkynylsulfonyl, $(C_3$-$C_8)$-cycloalkylsulfonyl, $(C_4$-$C_8)$-cycloalkenylsulfonyl, $(C_3$-$C_8)$-halocycloalkylsulfonyl, $(C_4$-$C_8)$-halocycloalkenylsulfonyl, $(C_3$-$C_8)$-cycloalkyl-$(C_1$-$C_4)$-alkylsulfonyl, $(C_4$-$C_8)$-cycloalkenyl-$(C_1$-$C_4)$-alkylsulfonyl, $(C_3$-$C_8)$-cycloalkyl-$(C_3$-$C_4)$-alkenylsulfonyl, $(C_4$-$C_8)$-cycloalkenyl-$(C_3$-$C_4)$-alkenylsulfonyl, $(C_1$-$C_6)$-alkyl-$(C_3$-$C_8)$-cycloalkylsulfonyl, $(C_2$-$C_6)$-alkenyl-$(C_3$-$C_8)$-cycloalkylsulfonyl, $(C_2$-$C_6)$-alkynyl-$(C_3$-$C_8)$-cycloalkylsulfonyl, $(C_1$-$C_6)$-alkyl-$(C_4$-$C_8)$-cycloalkenylsulfonyl, $(C_2$-$C_6)$-alkenyl-$(C_4$-$C_8)$-cycloalkenylsulfonyl, $(C_1$-$C_6)$-dialkylamino, $(C_1$-$C_6)$-alkylamino, $(C_3$-$C_6)$-alkenylamino, $(C_3$-$C_6)$-alkynylamino, $(C_1$-$C_6)$-haloalkylamino, $(C_3$-$C_6)$-haloalkenylamino, $(C_3$-$C_6)$-haloalkynylamino, $(C_3$-$C_8)$-cycloalkylamino, $(C_4$-$C_8)$-cycloalkenylamino, $(C_3$-$C_8)$-halocycloalkamino, $(C_4$-$C_8)$-halocycloalkenylamino, $(C_3$-$C_8)$-cycloalkyl-$(C_1$-$C_4)$-alkylamino, $(C_4$-$C_8)$-cycloalkenyl-$(C_1$-$C_4)$-alkylamino, $(C_3$-$C_8)$-cycloalkyl-$(C_3$-$C_4)$-alkenylamino, $(C_4$-$C_8)$-cycloalkenyl-$(C_3$-$C_4)$-alkenylamino, $(C_1$-$C_6)$-alkyl-$(C_3$-$C_8)$-cycloalkylamino, $(C_2$-$C_6)$-alkenyl-$(C_3$-$C_8)$-cycloalkylamino, $(C_2$-$C_6)$-alkynyl-$(C_3$-$C_8)$-cycloalkylamino, $(C_1$-$C_6)$-alkyl-$(C_4$-$C_8)$-cycloalkenylamino, $(C_2$-$C_6)$-alkenyl-$(C_4$-$C_8)$-cycloalkenylamino, $(C_1$-$C_6)$-trialkylsilyl, aryl, aryloxy, arylthio, arylsulfinyl, arylsulfonyl, arylamino, aryl-$(C_1$-$C_4)$-alkoxy, aryl-$(C_3$-$C_4)$-alkenyloxy, aryl-$(C_1$-$C_4)$-alkylthio, aryl-$(C_1$-$C_4)$-alkylsulfinyl, aryl-$(C_1$-$C_4)$-alkylsulfonyl, aryl-$(C_2$-$C_4)$-alkenylthio, aryl-$(C_2$-$C_4)$-alkenylsulfinyl, aryl-$(C_2$-$C_4)$-alkenylsulfonyl, aryl-$(C_1$-$C_4)$-alkylamino, aryl-$(C_3$-$C_4)$-alkenylamino, aryl-

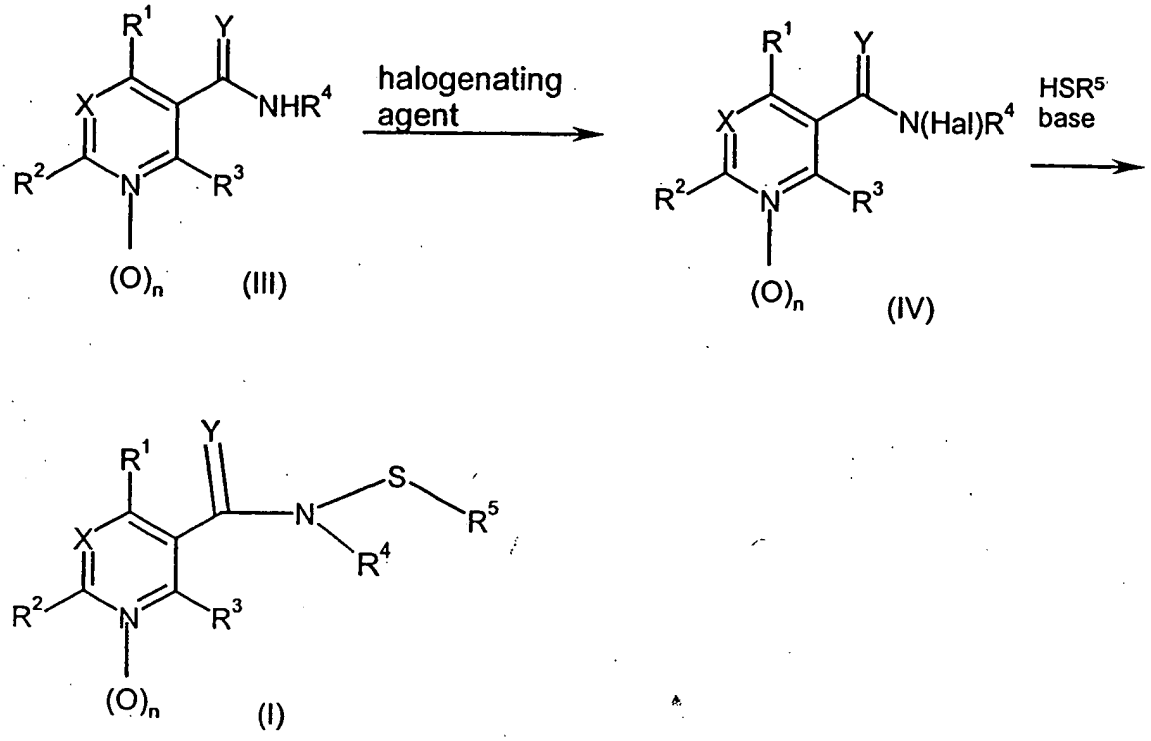
$(C_1$-$C_6)$-dialkylsilyl, diaryl-$(C_1$-$C_6)$-alkylsilyl, triarylsilyl and 5- or 6-membered heterocyclyl, where the cyclic moiety of the fourteen last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, cyano, nitro, amino, hydroxyl, thio, $(C_1$-$C_4)$-alkyl, $(C_1$-$C_4)$-haloalkyl, $(C_3$-$C_8)$-cycloalkyl, $(C_1$-$C_4)$-alkoxy, $(C_1$-$C_4)$-haloalkoxy, $(C_1$-$C_4)$-alkylthio, $(C_1$-$C_4)$-haloalkylthio, $(C_1$-$C_4)$-alkylamino, $(C_1$-$C_4)$-haloalkylamino and $(C_1$-$C_4)$-alkanoyl, and if R^9 is aryl or heterocyclyl, $(C_1$-$C_4)$-alkyl or C_1-$C_4)$-haloalkyl..

6. A compound of the formula (II) or a salt thereof as claimed in claim 2 where R^1 is SF_5, CHF_2, CF_2Cl or CF_3.

7. A compound of the formula (II) or a salt thereof as claimed in claim 2 where X is =CH-, Y′ is -O-, m and n are 0, R^1 is CF_3, R^2, R^3 and $R^{4'}$ are hydrogen and R^6 is $(C_1$-$C_{10})$-alkyl, $(C_3$-$C_8)$-cycloalkyl, aryl, benzyl or heterocyclyl having a total of one to three nitrogen, oxygen and/or sulfur ring atoms, where the radicals mentioned may be unsubstituted or mono- or polysubstituted.

8. A compound of the formula (II) or a salt thereof as claimed in claim 7 where the substituents are radicals R^7 having the following meaning: R^7 are identical or different R^8 or two radicals R^7 together with the atoms to which they are attached form a three- to eight-membered saturated or unsaturated ring system which is unsubstituted or substituted by one or more radicals R^8 and which may also contain further heteroatoms, selected from the group consisting of O, N, S, SO and SO_2; R^8 being as defined in claim 6.

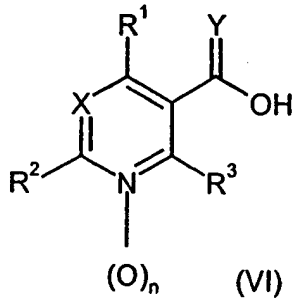
9. A process for preparing compounds of the formula (I) as claimed in claim 1, which comprises the following steps:



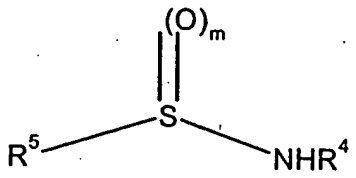
a) reaction of a carboxamide of the formula (III) with a halogenating agent to give a compound of the formula (IV), and

b) reaction of this compound with a thioether R^5SH in the presence of a base to give the end products of the formula (I), where in these formulae the radicals R^1, R^2, R^3, R^4, R^5, X and Y and the index n have the meanings given in claim 1 and Hal is halogen.

10. A process for preparing compounds of the formula (I) as claimed in claim 1, which comprises reacting an activated derivative of the carboxylic acid or thiocarboxylic acid of the formula (VI)



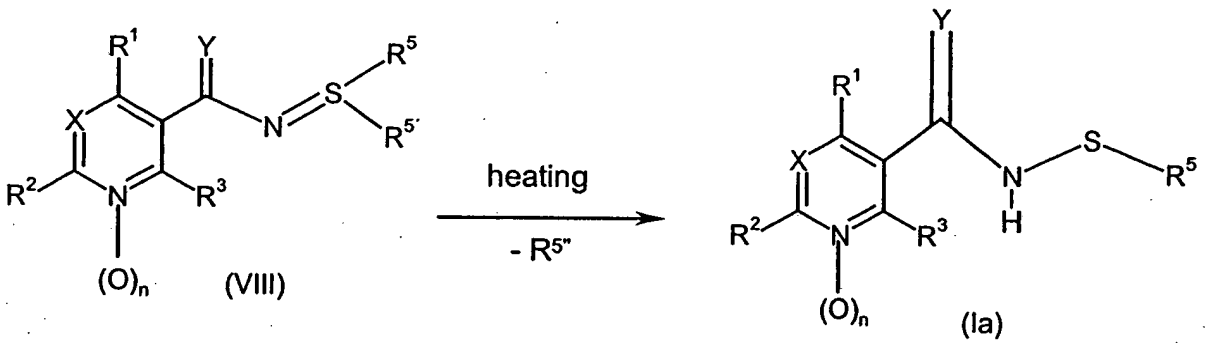
in the presence of a base with a compound of the formula (VII)



(VII)

where in these formulae the radicals R^1, R^2, R^3, R^4, R^5, X and Y and the indices m and n have the meanings given in claim 1.

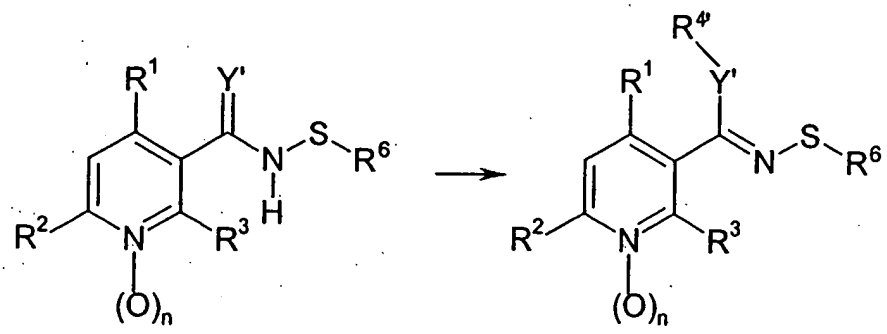
11. A process for preparing compounds of the formula (Ia) as claimed in claim 1 by thermal decomposition of the sulfimides of the formula (VIII)



(VIII) (Ia)

where the radicals R^1, R^2, R^3, R^5, X and Y and the index n are as defined in claim 1, $R^{5'}$ is one of the groups defined in claim 1 for R^5 having a β-hydrogen atom and $R^{5''}$ is the ethylenically unsaturated leaving group corresponding to $R^{5'}$ reduced by one hydrogen atom.

12. A process for preparing compounds of the formula (II) as claimed in claim 2, which comprises reacting the compounds of the formula (Ib)



(Ib) (II)

with an alcohol $R^{4'}$-OH in the presence of an azodicarboxylic acid diester and a phosphine in accordance with the scheme above to give the compounds of the formula (II) in which, $R^{4'}$ has one of the meanings defined in claim 2, except for H, and R^1, R^2, R^3, R^6, X, Y and n have one of the meanings defined in claim 2.

13. A composition having insecticidal, acaricidal, ixodicidal, nematicidal, molluscidal and/or fungicidal action, which comprises at least one compound of the formula (I) or a salt thereof and/or a compound of the formula (II) or a salt thereof as claimed in claim 1 and 2, respectively.

14. A method for controlling animal pests comprises the step of directly or indirectly applying to the pest a compound of the formula (I) or a salt thereof as claimed in claim 1.

15. A method for controlling animal pests comprises the step of directly or indirectly applying to the pest a compound of the formula (II) or a salt thereof as claimed in claim 2.

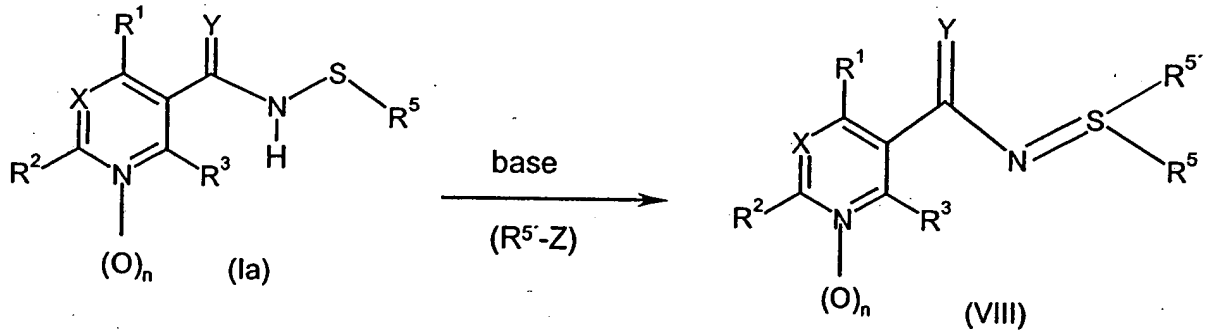
16. A method for warding off or fending off harmful organisms, where one or more compounds of the formula (I) or salts thereof as claimed in claim 1 are applied to the site from which the harmful organisms are to be fended off or warded off.

17. A method for warding off or fending off harmful organisms, where one or more compounds of the formula (II) or salts thereof as claimed in claim 2 are applied to the site from which the harmful organisms are to be fended off or warded off.

18. A veterinary medicament comprising a compound of the formula (I) or a salt thereof as claimed in claim 1.

19. A veterinary medicament comprising a compound of the formula (II) or a salt thereof as claimed in claim 2.

20. A process for preparing sulfimides of the formula (VIII) by reacting a thiohydroxamic acid of the formula (Ia) in the presence of a compound $R^{5'}$-Z and a base according to the scheme below:



where the radicals R^1, R^2, R^3, R^5, X and Y and the index n are as defined in claim 1, $R^{5'}$ independently of R^5 is one of the groups defined in claim 1 for R^5 and Z is a leaving group.